

**VI. WE CLAIM:**

1. Isolated, purified, or enriched nucleic acid comprising a control region of a human PPAR $\gamma$  gene.
2. The nucleic acid of claim 1 comprising a control region of human PPAR $\gamma$ 1 gene.
3. The nucleic acid of claim 1 comprising a control region of human PPAR $\gamma$ 2 gene.
4. The nucleic acid of claim 1 comprising a control region of human PPAR $\gamma$ 3 gene.
5. The nucleic acid of claim 1, wherein said control region comprises a human PPAR $\gamma$  gene fragment cloned in plasmid PPAC8856 deposited at ATCC under accession number 97906.
6. The nucleic acid of claim 1, wherein said control region comprises a human PPAR $\gamma$  gene fragment cloned in plasmid PPAR $\gamma$ 1 promoter-luc deposited at ATCC under accession number 97862.
7. The nucleic acid of claim 1, wherein said control region comprises a promoter capable of initiating the transcription of said human PPAR $\gamma$  gene.
8. The nucleic acid of claim 1, wherein said control region comprises a positive transcription element capable of up regulating or a negative transcription element capable of down regulating the transcription of said human PPAR $\gamma$  gene.

9. The nucleic acid of claim 1, wherein said control region comprises nucleotides 1-125 of SEQ ID NO: 1.
- 5 10. The nucleic acid of claim 1, wherein said control region comprises nucleotides 818-1320 of SEQ ID NO: 3.
11. The nucleic acid of claim 1, wherein said control region comprises nucleotides 368-1144 of SEQ ID NO: 34.
- 10 12. The nucleic acid of claim 1, wherein said control region comprises nt -125 to +196 of human PPAR $\gamma$ 1 gene, or a terminal deletion mutant thereof sufficient to initiate transcription.
- 15 13. The nucleic acid of claim 1, wherein said control region comprises nt -502 to +182 of human PPAR $\gamma$ 2 gene, or a terminal deletion mutant thereof sufficient to initiate transcription.
- 20 14. The nucleic acid of claim 1, wherein said control region comprises nt -777 to +74 of human PPAR $\gamma$ 3 gene, or a terminal deletion mutant thereof sufficient to initiate transcription.
- 25 15. A recombinant nucleic acid comprising a control region of a human PPAR $\gamma$  gene and a reporter sequence; wherein said control region is operably linked to said reporter sequence so as to effectively initiate, terminate or regulate the transcription of said reporter sequence.
16. The recombinant nucleic acid of claim 15, wherein said control region and reporter sequence are inserted in a vector.
- 30 17. The recombinant nucleic acid of claim 15, wherein said control region

comprises a promoter of said human PPAR $\gamma$  gene.

18. A cell comprising a recombinant nucleic acid, which comprises a control region of a human PPAR $\gamma$  gene and a reporter sequence; wherein said control region is operably linked to said reporter sequence so as to effectively initiate, terminate or regulate the transcription of said reporter sequence.
19. A Method of screening for an agent capable of modulating the expression of a human PPAR $\gamma$  gene, comprising the steps of:
- (a) providing an *in vitro* or *in vivo* system comprising a control region of said human PPAR $\gamma$  gene and a reporter sequence transcriptionally linked to said control region wherein said control region is effective to initiate, terminate or regulate the transcription of said reporter sequence;
  - (b) contacting a potential agent with said system; and
  - (c) comparing the level of transcription of said reporter sequence with the level in the absence of said agent; wherein a measurable difference in the level of transcription of said reporter sequence is an indication that said agent is useful for modulating the expression of said human PPAR $\gamma$  gene.
20. A method for modulating the expression level of a human PPAR $\gamma$  gene, comprising the step of administrating to a mammalian cell or a mammal a composition comprising an effective amount of a modulator of a control region of said human PPAR $\gamma$  gene.

21. The method of claim 20, wherein said modulator increases the expression level of said human PPAR $\gamma$  gene.
22. The method of claim 20, wherein said modulator lowers the expression level of said human PPAR $\gamma$  gene.
23. A method for treating a host suffering from a disease associated with abnormally high levels of a human PPAR $\gamma$  gene expression, comprising the step of administering to said host a composition containing a pharmaceutically effective amount of a down regulator of said *PPAR $\gamma$*  gene.
24. A method for treating a host suffering from a disease associated with abnormally low levels of a human PPAR $\gamma$  gene expression, comprising the step of administering to said host a composition containing a pharmaceutically effective amount of an up regulator of said PPAR $\gamma$  gene.
25. A pharmaceutical composition comprising a pharmaceutically effective amount of a modulator of a human PPAR $\gamma$  gene control region.